

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

McClure River Preparation Plant – Dickenson-Russell Coal Company, LLC
Big Caney Creek, Dickenson County, Virginia
Permit No. SWRO10804

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Dickenson-Russell Coal Company, LLC has applied for a renewal Title V Operating Permit for its McClure River Preparation Plant facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact: _____
Tony Adkins
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Date: June 5, 2009

Air Permit Manager: _____
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Date: June 5, 2009

Regional Director: _____
Dallas R. Sizemore

Date: June 5, 2009

FACILITY INFORMATION

Permittee

Dickenson-Russell Coal Company, LLC
Route 2, Box 73
Cleveland, VA 24225

Facility location

McClure River Preparation Plant
Two miles North of McClure on Big Caney Creek
Dickenson County, Virginia

Plant ID No. 51-051-00019

SOURCE DESCRIPTION

SIC Code: 1221 - Coal preparation

The facility cleans and dries coal prior to shipment by railcar and truck. The facility utilizes a thermal dryer to dry the coal cleaned by the wet preparation plant that includes froth flotation and vacuum filtration.

Air emissions from the facility include particulate matter (PM, includes PM-10) from all the dry processing units; volatile organic compounds (VOC) from the thermal dryer and wet coal processing; and nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO) and trace amounts of Hazardous Air Pollutants (HAP) from the thermal dryer.

The facility is a Title V major source of PM, particulate matter less than 10 microns (PM-10), SO₂, VOC and NO_x. This source is located in an attainment area for all pollutants. Portions of the facility are permitted under a Minor New Source Review (NSR) Permit issued on November 4, 1999 (as amended February 1, 2002 and April 8, 2003), and under a Prevention of Significant Deterioration (PSD) permit issued April 2, 1984. Copies of each permit are included as attachments.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
1	---	Mine Raw Belt	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2	---	Mid-Vol Breaker	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2A	---	Rotary Breaker	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2B	---	AFB Rock Belt	200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2C	---	AFB Rock Bin	200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2D	---	Mine Rock Bin	200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
2E	---	Sample Belt	25 TPH	Wet suppression or enclosure	----	PM/PM-10	----
3	---	Mine Raw Transfer Belt	2300 TPH	Wet suppression or enclosure	----	PM/PM-10	----
4	---	Shakeout/Truck Dump	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
5	---	Foreign Belt	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
6	---	Foreign Breaker Building	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
6A	---	Foreign Rock Chute	200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
6B	---	Foreign Rock Bin	200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
7	---	Foreign Raw Belt	1500 TPH	Wet suppression or enclosure	----	PM/PM-10	----
8	---	Plant Feed Belt	1400 TPH	Wet suppression or enclosure	----	PM/PM-10	----
10	---	Preparation Building	1400 TPH	Wet suppression or enclosure	----	PM/PM-10	----
11	---	Silo 1 Feed (Midds Storage) Belt	400 TPH	Wet suppression or enclosure	----	PM/PM-10	----
12	---	Dryer Fed Belt	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
13	13-1	Thermal Dryer - ENI Coal #10	411.3 TPH	Cyclone Wet Scrubber Mist Eliminator	13-1 13-2 13-3	PM,PM-10, SO ₂	4/2/84

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
13A	13-1	Thermal Dryer – Coal	130 MMBtu/hr	Cyclone Wet Scrubber Mist Eliminator	13-1 13-2 13-3	PM,PM-10, SO ₂	4/2/84
13B	13-1	Thermal Dryer - Oil/Elect.	12 MMBtu/hr	Cyclone Wet Scrubber Mist Eliminator	13-1 13-2 13-3	PM,PM-10, SO ₂	4/2/84
14	---	Refuse Belt 1	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
16	---	Refuse Belt 2	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
16A	---	Refuse Belt 3	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
16B	---	Refuse Bin	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
17	---	Silo 2 Feed Belt	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
18	---	Silo 1	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
19	---	Silo 2	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
20	---	Foreign Clean Belt In (Chute)	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
22	---	Loadout Belt	1200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
23	---	Loadout	1200 TPH	Wet suppression or enclosure	----	PM/PM-10	----
24	---	Dryer Bypass Chute	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----
25	---	Dump Bin	800 TPH	Wet suppression or enclosure	----	PM/PM-10	11/4/99 as amended 2/1/02 and 4/8/03
26	---	48" Conveyor	800 TPH	Wet suppression or enclosure	----	PM/PM-10	11/4/99 as amended 2/1/02 and 4/8/03
27	---	Roads	----	Wet suppression	----	PM/PM-10	----
28	---	Mine Clean Belt	800 TPH	Wet suppression or enclosure	----	PM/PM-10	----

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
28A	---	Top of Silo Transfer Belt	800 TPH	Wet suppression or enclosure	-----	PM/PM-10	-----
28B	---	Clean Coal Transfer Belt	800 TPH	Wet suppression or enclosure	-----	PM/PM-10	-----
29	---	Midds Collection Belt	400 TPH	Wet suppression or enclosure	-----	PM/PM-10	-----
48	---	Raw Storage Pile	3800 TPH	Wet suppression	-----	PM/PM-10	-----
49	---	Clean Storage Pile	3800 TPH	Wet suppression	-----	PM/PM-10	-----
50	---	Refuse Pile	800 TPH	Wet suppression	-----	PM/PM-10	-----
51	---	Midds Belt	300 TPH	Wet suppression or enclosure	-----	PM/PM-10	11/4/99 as amended 2/1/02 and 4/8/03
52	---	Midds Bin	300 TPH	Wet suppression or enclosure	-----	PM/PM-10	11/4/99 as amended 2/1/02 and 4/8/03

EMISSIONS INVENTORY

A copy of the 2007 permit application emission inventory is included in the application. Emissions are summarized in the following table:

2007 Actual Emissions	Criteria Pollutant Emission in Tons/Year			
	VOC	SO ₂	PM-10	NO _x
Total	67.426	28.641	17.987	105.638

The emission of HAPs is considered negligible.

EMISSION UNIT APPLICABLE REQUIREMENTS

Thermal Dryer - ENI Coal Flo #10 Dryer - ID# 13

Limitations

The thermal dryer commenced operation in 1980 after a state permit had been issued November 29, 1977 and a PSD permit was issued on July 9, 1979 by the United States Environmental Protection Agency (EPA). EPA subsequently modified the PSD permit on July 1, 1981. On April 2, 1984, the two permits were merged into a single permit and the Commonwealth of Virginia took over enforcement of the PSD permit conditions. There have not been any subsequent modifications to the thermal dryer.

The facility is subject to 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants and 9 VAC 5-50-410 Subpart Y. The following limitations are BACT requirements from the consolidated PSD permit issued April 2, 1984. Please note that the condition numbers are from the 1984 PSD permit. A copy of the permit is enclosed as an attachment.

Specific Condition 4: Limit on hours of operation.

Specific Condition 6: Emission limitations.

Specific Condition 7: Required control equipment for the thermal dryer.

Specific Condition 9: Approved fuels.

Specific Condition 12: Visible emission limitation.

Specific Condition 14: Requirement to restrict public access to areas where the concentration of sulfur dioxide and/or particulate matter was modeled to exceed the standard.

Monitoring

Specific Condition 11 and General Condition 5 require monitoring as specified below:

Continuous measurement of the thermal dryer exit gas temperature.

Continuous measurement of the venturi pressure loss.

Continuous measurement of the water supply pressure.

The Title V permit contains a requirement for visible emissions observations of the thermal dryer exhaust at least once each consecutive 14-day period to determine if the unit has any visible emissions (does not include condensed water vapor/steam). If visible emissions are observed during these required observations, visible emissions evaluations (VEE) in accordance with 40 CFR 60 Appendix A, Method 9, shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed twenty percent (20%), the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exist; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

Based on results from stack testing conducted upon initial startup, the emissions from the facility are not likely to exceed the emission standards. With proper operation of the equipment and associated controls, the thermal dryer will not exceed the emission limitations.

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These are listed in the facility wide section below.

The facility is a major source subject to Title V permitting and therefore subject to 40 CFR Part 64 – Compliance Assurance Monitoring (CAM). An emission unit is subject to CAM if it meets all of the following criteria on a pollutant-by-pollutant basis:

- a. Emits or has the potential to emit uncontrolled quantities of one or more regulated air pollutants at or above major source levels,
- b. Is subject to one or more emissions limitations for the regulated air pollutants for which it is major before control, and

- c. Uses an add-on control device to achieve compliance with the emissions limitations.

The thermal dryer uses a venturi scrubber to comply with the PM emission limit, therefore, the thermal dryer meets the above criteria only when considering PM, CAM is required only for PM. The applicant submitted CAM information as required by 40 CFR 64.5, Deadlines for Submittals.

The permit contains requirements for installation of the following:

- a. A monitoring device for the temperature of the gas at the exit of the thermal dryer;
- b. A monitoring device for the measurement of the pressure loss through the venturi constriction of the control device; and
- c. A monitoring device for the measurement of the water supply pressure to the control equipment.

The permit contains requirements to monitor, operate, calibrate and maintain the above-listed devices according to the CAM plan proposed by the applicant and summarized in the following table:

Thermal Dryers (ID# 13) Compliance Assurance Monitoring Plan

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Exhaust Gas Temperature	Pressure Loss	Water Supply Pressure
A. Measurement Approach	Temperature measurement device	Differential pressure gauge	Pressure gauge
II. Indicator Range	To be established during the initial performance tests	An excursion is defined as a pressure loss through the scrubber of less than 20 and greater than 50 inches water column	An excursion is defined as a water supply pressure of less than 15 pounds per square inch gage
III. Performance Criteria			
A. Data Representativeness	The temperature measurement device monitors the temperature of the gas at the exit of the thermal dryer	The differential pressure gauge monitors the static pressures upstream and downstream of the scrubber's venturi throat	The water pressure gauge monitors water supply pressure to the scrubber. The gauge is to be located close to the water discharge point.
B. Verification of Operational Status	The monitoring device shall be installed and calibrated according to the manufacturer's recommendations prior to the initial performance tests	The monitoring device shall be installed and calibrated according to the manufacturer's recommendations prior to the initial performance tests	The monitoring device shall be installed and calibrated according to the manufacturer's recommendations prior to the initial performance tests
C. QA/QC Practices and Criteria	The device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit and calibrated annually based on manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within ± 1 inch water gage and calibrated annually based on manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within $\pm 5\%$ of design water supply pressure and calibrated annually based on manufacturer's recommendations
D. Monitoring Frequency	Measure continuously	Measure continuously	Measure continuously
E. Data Collection Procedures	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder
F. Averaging Period	None	None	None

(9 VAC 5-80-110 and 40 CFR 64)

Testing

The Title V permit requires that a stack test be conducted within 180 days of permit issuance and then once every five years, conducted prior to submitting the renewal Title V application. The Department and EPA have authority to require additional testing not included in this permit, if necessary, to determine compliance with an emission limit or standard.

Reporting

No specific reporting requirements have been included in the permit for the thermal dryer.

Streamlined Requirements

Specific Condition 10 and General Conditions 1, 2, 3, and 9, of the PSD permit have not been included in the Title V permit. The requirements contained in these conditions have been met and are no longer applicable.

Coal Processing and Handling Equipment - Ref. No. 25, 26, 51, and 52

Limitations

The following limitations are state BACT requirements from the minor New Source Review (NSR) permit issued on November 4, 1999 (as amended February 1, 2002 and April 8, 2003). Please note that the condition numbers are from the minor NSR permit. A copy of the permit is enclosed as an attachment.

Condition 3: Specification of particulate emissions control for the truck dump bin.

Condition 4: Specification of particulate emissions control for coal transfer.

Condition 6: Limit on yearly coal throughput for truck dump bin (25) and truck dump conveyor (26).

Condition 7: Limit on yearly coal throughput for middlings coal conveyor (51) and middlings coal bin (52).

Condition 8: Emission limitations for truck dump bin, truck dump conveyor, middlings coal bin and middlings coal conveyor.

Monitoring

The monitoring requirements included in the permit meet Part 70 requirements. They are specified in the facility wide section below.

Recordkeeping requirements are specified in the Facility Wide section listed below.

Reporting

No specific reporting requirements have been included in the permit for the coal processing and handling equipment at the facility.

Streamlined Requirements

There are no streamlined requirements for this operation.

Facility-Wide Requirements

Limitations

The permit includes the coal processing and cleaning equipment as the facility-wide equipment.

The following limitations are state BACT requirements from the minor New Source Review (NSR) permit issued on November 4, 1999 (as amended February 1, 2002 and April 8, 2003). Please note that the specific condition numbers are from the minor NSR permit unless otherwise noted. A copy of the permit is enclosed as an attachment.

Condition 5: Particulate emissions control requirements. (Specific Condition 13 of the April 2, 1984 PSD permit also applies)

Condition 9: Visible emission limit of 20%.

Condition 10: Requires compliance with New Source Performance Standards, Subpart Y, Standards of Performance for Coal Preparation Plants.

Condition 12: The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum.

The coal processing and cleaning equipment is subject to 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants. The coal processing and cleaning equipment is also subject to 9 VAC 5, Chapter 40, Article 15, Emission Standards for Coal Preparation Plants. 9 VAC 5, Chapter 40, Article 15, which does not indicate any emission limits for the coal processing equipment, only references to the normal existing rules for visible emissions, fugitive emissions and others. Since the visible emissions limitation from 40 CFR 60, Subpart Y is more stringent, that limitation will be used.

Monitoring

The monitoring requirements included in the permit meet Part 70 requirements.

The permit contains a requirement for all coal processing, conveying, storage, transfer and loading systems, excluding the thermal dryer, to be visually observed at least once each calendar week to determine which operating emissions units have visible emissions (does not include condensed water vapor/steam). If visible emissions are observed during these weekly observations, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 will be conducted on those units with visible emissions. The VEE will be conducted for a minimum of six (6) minutes. If any of the observations exceed twenty percent (20%), the VEE will be conducted for a total of sixty (60) minutes. A Method 9 evaluation will not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions exist; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. This satisfies the periodic monitoring requirement for the visible emission limitation included in the permit.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

1. The amount of coal consumed by the thermal dryer, calculated monthly as the sum of each consecutive 12-month period.
2. The monthly and annual production of dried coal. The annual production shall be calculated monthly as the sum of each consecutive 12-month period.
3. The monthly and annual hours of operation of the thermal dryer. The annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period.
4. The amount of coal processed in the truck dump bin (25) and the truck dump conveyor belt (26), calculated monthly as the sum of each consecutive 12-month period.
5. The amount of coal processed in the middlings coal conveyor belt (51) and middlings coal bin (52), calculated monthly as the sum of each consecutive 12-month period.
6. The results of the annual calibration of the thermal dryer measurement devices.
7. The log of annual inspections for each cyclone.
8. The log of visible emission observations and the results of all VEEs for the thermal dryer and coal processing equipment.

9. Records of training provided including names of trainees, date of training, and nature of training

Testing

The permit does not require source tests for any of the coal processing equipment. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit, if necessary, to determine compliance with an emission limit or standard.

Reporting

Facility-wide reporting requirements are discussed in the General Conditions sections below.

Streamlined Requirements

There are no streamlined requirements.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 3-2006”.

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-

250. The report must be made within four daytime business hours of discovery of the malfunction.

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

STATE-ONLY APPLICABLE REQUIREMENTS

Dickenson-Russell Coal Company, LLC identified odor and the toxics regulation as applicable in their application which are state-only requirements since they were not included in the NSR permit. All the requirements contained in the minor NSR permit are federally enforceable. No state-only applicable requirements have been included in the permit.

FUTURE APPLICABLE REQUIREMENTS

Dickenson-Russell Coal Company, LLC did not identify any future applicable requirements in their application, and DEQ is unaware of any future requirements that may apply during the life of the Title V permit. Therefore, no future applicable requirements have been included in the permit.

INAPPLICABLE REQUIREMENTS

Dickenson-Russell Coal Company, LLC did not identify any inapplicable requirements in their application. Therefore, no inapplicable requirements are included in the permit.

COMPLIANCE PLAN

Dickenson-Russell Coal Company, LLC is currently in compliance with all applicable requirements. No compliance plan was required in the application.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation ¹ (9 VAC)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
30-33	Storage Tanks	5-80-720 B 2.	VOC	N/A
36-38	Storage Tanks	5-80-720 B 2.	VOC	N/A
40-44	Storage Tanks	5-80-720 B 2.	VOC	N/A
56	Storage Tanks	5-80-720 B 2.	VOC	N/A

¹The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 B - Insignificant due to emission levels

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in *The Dickenson Star* newspaper in Clintwood, Virginia on March 18, 2009. EPA was notified of the public notice on March 16, 2009. The affected states, including West Virginia, Kentucky and Tennessee, were sent a copy of the public notice in a letter dated March 16, 2009. All persons on the Title V mailing list were sent a copy of the public notice by electronic mail, fax or letter dated no later than March 18, 2009.

Public comments were accepted from March 18, 2009, through April 17, 2009 with no comments having been received.